

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match.
The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.
Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

C-A OPERATIONS PROCEDURES MANUAL

12.23 Rules and Regulations for TtB Key Entry

Text Pages 2 through 4

Hand Processed Changes

| <u>HPC No.</u> | <u>Date</u> | <u>Page Nos.</u> | <u>Initials</u> |
|----------------|-------------|------------------|-----------------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

Approved: _____ ***Signature on File*** _____
Collider-Accelerator Department Chairman Date

M. Wiplich

12.23 Rules and Regulations for TtB Key Entry

1. Purpose

The purpose of this procedure is to define the rules and regulations for entrance into the TtB complex of buildings and tunnels.

2. Responsibilities

It is the responsibility of the person or persons executing this procedure to observe all safety rules.

3. Prerequisites

3.1 Tandem Operator training

3.2 TtB Key Training

4. Precautions

No special precautions are required.

5. Procedure

5.1 Entrance into the TtB tunnel complex is restricted to those having been issued keys after appropriate training or those escorted by a qualified key holder.

5.2 Keys are issued by the TVDG Safety Coordinator and/or Operations Supervisor only after this safety instruction sheet has been read, understood and signed by the key recipient.

5.3 Auditable records of key issuance and training sheets shall be maintained by the TVDG Safety Coordinator.

5.4 Notification and receipt of permission from a qualified TVDG Operator is required prior to any tunnel entry. This rule remains in effect when beam transport is not in use. Contact the TVDG Control Room at Ext. 4584 for permission to enter the TtB complex.

5.5 Temporary, short term entry will be granted to otherwise qualified, non-permanent key holders only after reading and signing these instructions. These non-permanent key holders will be initially escorted to the job site by

a TVDG Operator who will point out any hazards in the immediate job area. The temporarily issued key shall be returned to the TVDG Control Room upon completion of the job or at the end of the shift, whichever occurs first.

- 5.6 Maintenance or other planned work, or work during off-shift periods should be scheduled with the TVDG Operations Supervisor as early as possible to avoid any conflicts in gaining entry to the TtB complex.
- 5.7 Keys issued by means of this training shall not be given or lent to any other person.
- 5.8 Entry doors into the tunnel shall not be blocked open.
- 5.9 Storage of flammable materials within the tunnel area is forbidden. All packing material, flammable waste, etc. is to be removed immediately upon completion of the work requiring these substances.
- 5.10 Quantities of flammable liquids such as acetone, alcohol, etc. are to be kept to a minimum. Individual containers of flammable liquids larger than one pint are not allowed in the tunnel. Remove any remainder of such liquids at the end of the job.
- 5.11 Much of the TtB tunnel floor is pitched, sometimes imperceptibly. All wheeled carts, wagons, leak detectors, gas cylinder carts, etc. shall be parked and/or chocked in such a way as to prevent their rolling. Besides the possibility of personnel injury due to rolling items, sensitive vacuum equipment and electronics can be seriously damaged.
- 5.12 A clear aisle for emergency egress shall be maintained at all times. Do not block the passageway with carts, turbopumps, etc.
- 5.13 General cleanliness shall be maintained in all parts of the TtB complex. Clean up all debris and spills immediately.
- 5.14 Under certain conditions AC voltages up to and including 480 VAC may be present within some electrical cabinets. DC voltages up to and including 5 KVDC may be present at ion pumps. Use proper procedures as described in the BNL Environment, Safety and Health Manual [Section 1.5.0 Electrical Safety](#) and [Section 1.5.1 Lockout/Tagout Requirements](#) at all times.
- 5.15 Current radiation conditions are posted at all tunnel entrances. Observe the posting requirements at all times.

- 5.16 Beam 'Crash' buttons are available throughout the complex. Activation of any of these buttons will prevent the injection of beam into the tunnel and when the TVDG Control Room is manned, will also summon help. In case of emergency, call 2222 or 911 and/or pull a fire alarm box.
- 5.17 Non-emergency assistance is available from the TVDG Control Room by telephone at Ext. 4584 or 2866. Intercom channel 4 may also be used.
- 5.18 Emergency exit from the tunnel is available as follows:
- 5.18.1 into the TVDG Facility at the high energy end of MP-7
 - 5.18.2 through any of the three power supply house buildings
 - 5.18.3 via any of the three emergency exit routes located approximately half way between power supply buildings.
- All exits are posted with self-illuminating 'EXIT' signs.
- 5.19 All primary beamline equipment is to be considered as possibly activated and may not be removed from the tunnel without a survey from Health Physics.

I certify that I have read and understood the above rules and regulations pertaining to access into the TtB complex.

Name: _____

Date: _____ *Signature* _____

Key Number - 3HITL/ _____

Issuer: _____

6. Documentation

6.1 Copy of completed procedure sheets to TVDG Safety Coordinator.

7. References

None

8. Attachments

None